



**ACHIEVING RAPID PROJECT EXECUTION IN
CHINA'S PHARMACEUTICAL INDUSTRY:
INSIDER'S INSIGHTS**

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HOW TO EXECUTE RAPID PHARMACEUTICAL PROJECTS IN CHINA

WHY WE NEED TO BE FAST



Client's Demand

Multiple reasons for our clients to be faster and faster.
Only one reason for Engineering/Service provider.

- New products launch in a limit of time.
- Increase in demand caused by drastic market changes.
- Capital driven for progress in fund utilization and rapid construction.
- Breakthrough from R&D, need to be commercialized ASAP.
- Government pressures on companies to complete project construction within specified time frames to meet government performance indicators.



HIGH OPERATING
EFFICIENCY

Project turnover in a short period of time .



HIGH PROFIT
MARGINS

Equipment procurement brings extra profit.



LOW MARKET
COMPETITION

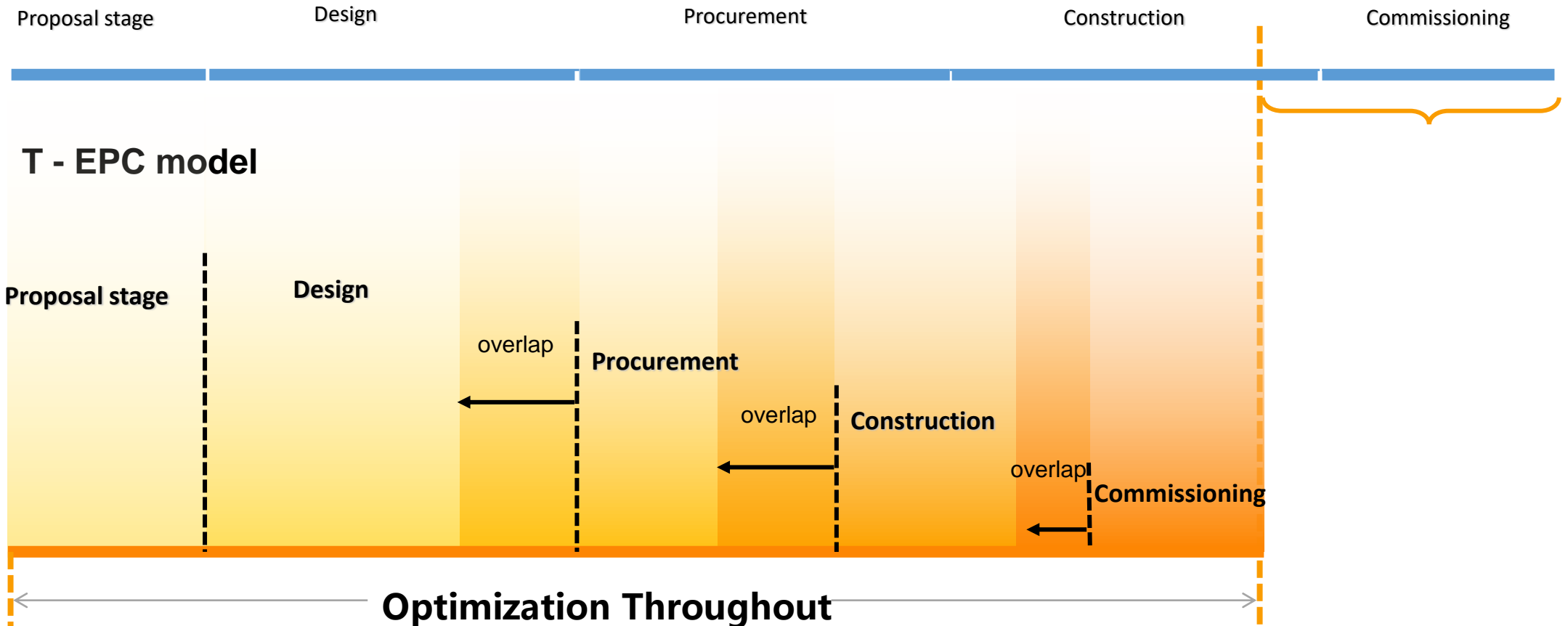
Not much of competitors can do this kind of work.

TYPICAL PHARMACEUTICAL PROJECT EXECUTION TIME IN CHINA



Phase	Duration	Content	Note
DESIGN	6±2 months	SMP/Layout Development/DD Very low added value as designer/Translate client's thoughts into drawing	Design costs account for 2% Overall Investment
CIVIL CONSTRUCTION	6 ±2months	Building & Site	24/7 Construction
MEP & INSTALLATION	9 ±2months	Including SAT & Supporting documents for Q/V	
Several Bidding Packages for Different Supplier		Right Bid-Pack for Right Supplier/Don't Trust EPC Model	
Fast execution when decided		Land/Building ready in a short time/loose government control	
lack of planning and not enough time for a good design		Contractor making DD or modify DD on site/ Lack of change management/Long settlement cycle	

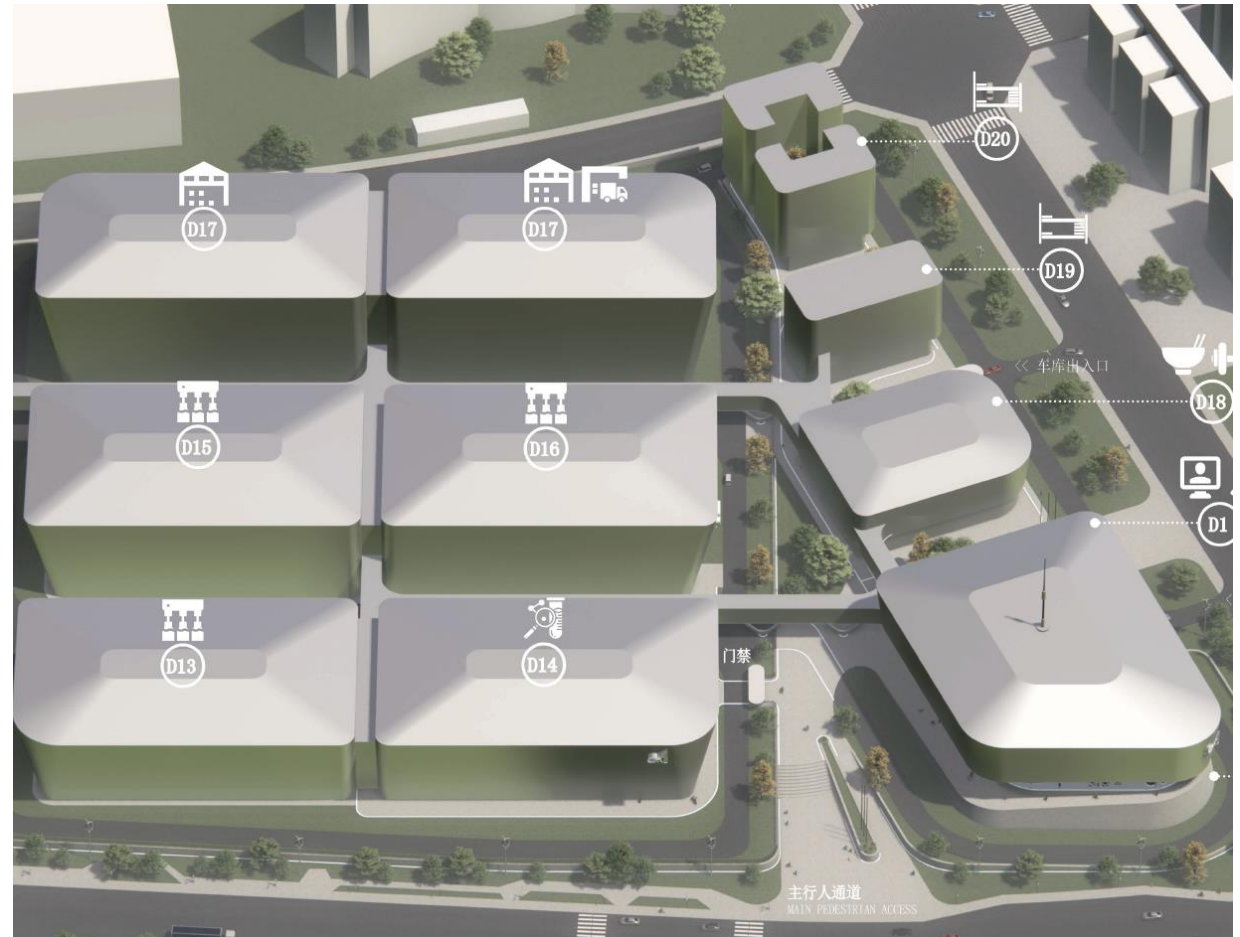
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WHAT YOU NEED BEFORE CONTRACT SIGNING



- Process Experts
Talents who understand the process and are capable of assisting client in optimizing it
- Own Inhouse Design Team
Design is always the most critical factor to help you gain EPC projects.
- Pre-Invest
 - 70%-80% Design finished before LOI.
 - Contract negotiation completed with equipment suppliers .
- Integrated Engineering Team
Build a strong engineering team integrate Design/Civil Construction Management/MEP & Installation/Automation(process and utilities)/Waste Treatment. Reduce outside parties to reduce risk. Takes more efforts to coordinate outside parties and you cannot really control if you don't own the team.
- Reasonable Investment Budget
Work with client together to make a reasonable investment estimation as the contract basis. A stable payment flow ensures the smooth and efficient progress of the project.



HOW TO EXECUTE RAPID PHARMACEUTICAL PROJECTS IN CHINA



– On-site design

All the designers are available on-site to update and modify drawings 24/7. BIM modeling guides construction (BIM modeling engineer works on site to maintain building model 24/7 and to ensure construction accuracy).

– Cross working matrix

Everyone is part of the project, working together in one office. Break departments and teams' restrictions/segregations. Achieve targets with lowest coordination costs.

– Risk Management

Equipment Delivery Risk (Supervision of equipment manufacturing/Alternative solution / process optimization)
Equipment supplier is most of time the 3rd party, must be well managed.

Process Change Risk (Keep helping client to overcome challenges by non-stop optimization)

– Flexible Coordination

Rational overall planning for construction time and space. Overlap arrangements for works in different phases and parallel arrangements for works in different space. Maximize the use of time and space opportunities.





FAST TRACK EPC PHARMACEUTICAL PROJECTS OVERVIEW

Synthetic Biology

New Biodegradable Materials

Total Investment: 1.25 Billion RMB

Capacity: 25'000 tons PHA



Bluepha
蓝晶微生物



Phase III

Phase II

Phase I

仓库区
Storage Area

发酵区
Fermentation Zone

造粒区
Granulation Zone

提取区
Extraction Zone

Contract Signing: Jan 2022



2022年3月26日

项目正式开工

March 26, 2022 - The project officially commences

26 February 2024

Page 9



2022年5月12日

发酵罐吊装完成



2022年7月15日

主体结构封顶

July 15, 2022: The main structure is capped.



2022年10月15日

主体结构完工

October 15, 2022: Completion of the main structure.



Bluepha
蓝素生物

TIAN'S 天俱时

江苏蓝素生物材料有限公司

25000吨生物材料 PHA 产业化项目
GRADUATION PROJECT OF 25000 TON BIOMATERIAL PHA INDUSTRIALIZATION PROJECT OF JIANGSU LANSU BIOMATERIAL

仪式
MONY

2022年10月28日

试车启动

October 28, 2022: Trial operation commences.

26 February 2024

Page 13



环保区

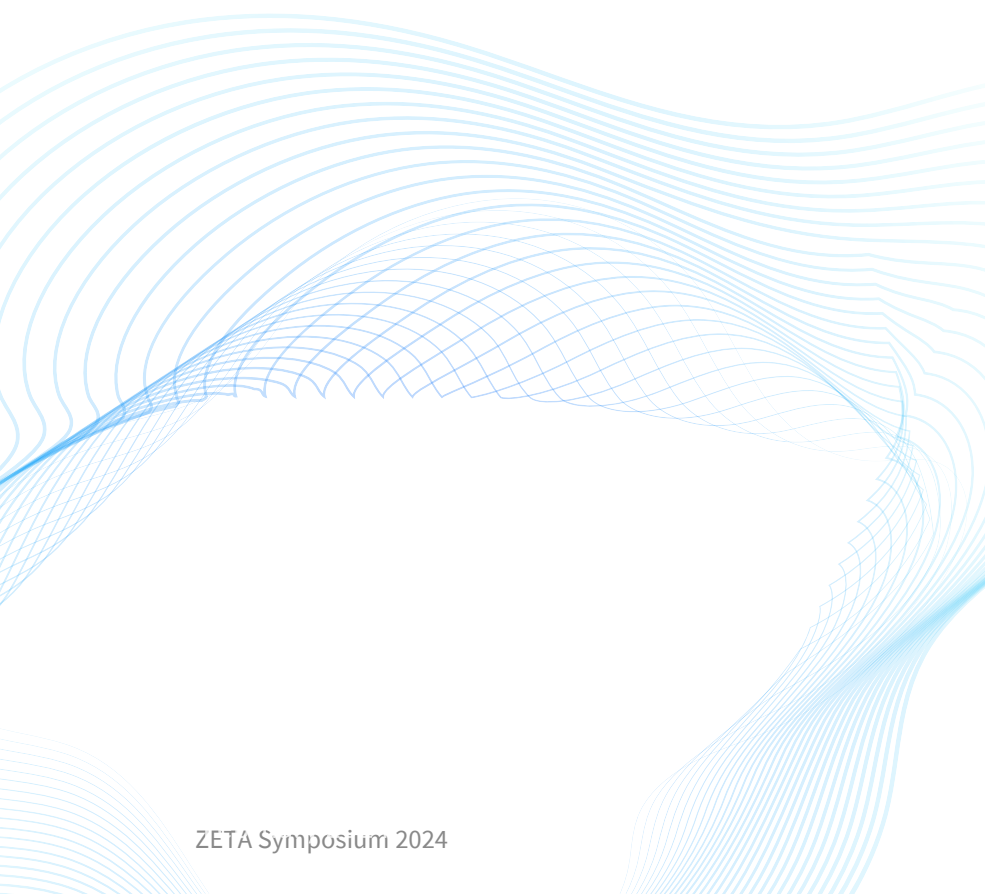
Post-Production Environmental Protection Area

罐区

Tank Farm

办公区

Office Area



发酵区


Fermentation Zone

WHAT IS 5-10 YEARS OUTLOOK FOR CHINA MARKET

Conform to the policy trend

 Biotechnology

 New Materials

 New Energy

 EV

 AI

 Chip Industry



Thank you